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Effectiveness of Muscle Energy Technique in Improving Hamstring Flexibility in Patients with Knee Osteoarthritis

Life Sciences-Physiotherapy

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ABSTRACT

Osteoarthritis is one of the main reasons for the disability and socio-economic burden in the world. There is a solid scientific basis for the possibility of decreased hamstring flexibility in patients with knee OA. Shortening the hamstring muscle leads to an increased patellofemoral compressive force, resulting in patellofemoral syndrome often associated with Osteoarthritis. The present study aims to determine the effectiveness of Post isometric relaxation in increasing hamstring flexibility in patients with knee osteoarthritis. 40 patients with pre-diagnosed cases of knee osteoarthritis were included in this study. The patients were divided into two groups, i.e., Group A and Group B. Group A was the experimental group, and Group B was the control group. Group A subjects were subjected to post-isometric relaxation of the hamstring muscle, and Group B subjects were subjected to static stretching of the hamstring muscle for 3 sessions per week for 2 weeks, i.e., a total of 6 sessions. The outcome measure was the Active Knee Extension (AKE) test. The Pre Vs Post-test mean value of AKE was 18.4 ± 1.3 in the experimental group, and in the control group was 10.6 ± 1.48 , with $p\text{-value} < .001^{**}$. The result shows greater improvement in the experimental group's AKE compared to the control group. The study concluded that MET (post-

isometric relaxation) significantly improves hamstring flexibility in patients with knee osteoarthritis.

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